

FIGURES AND SEQUENCES (600-1-285P)

(locations of polymorphisms or sites of polymorphisms appear in bold underline)

FIGURE 1 AND SEQ ID NO:1

wild-type hKOR

```
1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
61 tgcctgcccc ccaacagcag cgectggttt cccggctggg ccgagcccga cagcaacggc
121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
181 atcatcacgg cggctctactc cgtagtggtc gtcgtgggct tgggtgggcaa ctcgctggtc
241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
361 atgaattcct ggcttttttg ggatgtgctg tgcaagatag taatttccat tgattactac
421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
541 tgcattctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacaaaa
601 gtcaggggaag acgtcgatgt cattgagtgc tccttgagc tcccagatga tgactactcc
661 tgggtgggacc tcttcatgaa gatctgcgtc ttcattcttg ccttcgtgat ccctgtcctc
721 atcatcatcg tctgtctacac cctgatgac ctgcgtctca agagcgtccg gctcctttct
781 ggctccccgag agaaagatcg caacctgcgt aggatcacca gactggctct ggtgggtggg
841 gcaagtcttcg tgcgtctgctg gactccatt cacatattca tcctgggtgga ggctctgggg
901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatcgc cttaggctat
961 accaacagta gcctgaatcc cattctctac gcctttcttg atgaaaagt caagcggtgt
1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
1141 tgactagtcg tgga
```

FIGURE 2 AND SEQ ID NO:2

C852T polymorphism of hKOR

```
1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
61 tgcctgcccc ccaacagcag cgectggttt cccggctggg ccgagcccga cagcaacggc
121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
181 atcatcacgg cggctctactc cgtagtggtc gtcgtgggct tgggtgggcaa ctcgctggtc
241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
361 atgaattcct ggcttttttg ggatgtgctg tgcaagatag taatttccat tgattactac
421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
541 tgcattctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacaaaa
601 gtcaggggaag acgtcgatgt cattgagtgc tccttgagc tcccagatga tgactactcc
661 tgggtgggacc tcttcatgaa gatctgcgtc ttcattcttg ccttcgtgat ccctgtcctc
```

1 721 atcatcatcg tctgctacac cctgatgata ctgcgtctca agagcgccg gctcctttct
 2 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggctct ggtggtggtg
 3 841 gcagtccttcg tctgtctgtg gactccatt cacatattca tctggtgga ggctctgggg
 4 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 5 961 accaacagta gcctgaatcc cattctctac gcctttcttg atgaaaaatt caagcgggtg
 6 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggagagcac tagcagagtc
 7 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 8 1141 tgactagtcg tgga

FIGURE 3 AND SEQ ID NO:3

C948T polymorphism of hKOR

1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
 61 tgcctgcccc ccaacagcag cgcttggttt cccggctggg ccgagcccg cagcaacggc
 121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
 181 atcatcacgg cggctctactc cgtagtggtc gtcgtgggct tgggtgggcaa ctgcgtggtc
 241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
 301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
 361 atgaattcct ggcttttttg ggatgtgctg tgcaagatag taatttccat tgattactac
 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
 481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
 541 tgcactctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacaaaa
 601 gtcagggaag acgtcgatgt cattgagtgc tccttgcatg tcccagatga tgactactcc
 661 tgggtgggacc tcttcatgaa gatctgcgtc ttcactcttg ccttcgtgat ccctgtcctc
 721 atcatcatcg tctgctacac cctgatgata ctgcgtctca agagcgccg gctcctttct
 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggctct ggtggtggtg
 841 gcagtccttcg tctgtctgtg gactccatt cacatattca tctggtgga ggctctgggg
 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 961 accaacagta gcctgaatcc cattctctac gcctttcttg atgaaaaatt caagcgggtg
 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggagagcac tagcagagtc
 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 1141 tgactagtcg tgga

FIGURE 4 AND SEQ ID NO:4

C1008T polymorphism of hKOR

1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
 61 tgcctgcccc ccaacagcag cgcttggttt cccggctggg ccgagcccg cagcaacggc
 121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catcccggtc
 181 atcatcacgg cggctctactc cgtagtggtc gtcgtgggct tgggtgggcaa ctgcgtggtc
 241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
 301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
 361 atgaattcct ggcttttttg ggatgtgctg tgcaagatag taatttccat tgattactac
 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg

1 481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
 2 541 tgcacatggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacccaaa
 3 601 gtcaggggaag acgtcgatgt cattgagtgc tccttgacagt tcccagatga tgactactcc
 4 661 tgggtgggacc tcttcatgaa gatctgcgtc ttcacatcttg ccttcgtgat ccctgtcctc
 5 721 atcatcatcg tctgctacac cctgatgatc ctgctgtctca agagcgtccg gctcctttct
 6 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
 7 841 gcagtgcttcg tggctgtctg gactccatt cacatattca tcctggtgga ggctctgggg
 8 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 9 961 accaacagta gcctgaatcc cattctctac gcctttcttg atgaaaattt caagcgggtg
 10 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
 11 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 12 1141 tgactagtcg tgga

FIGURE 5 AND SEQ ID NO:5

G36T polymorphism of hKOR

1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
 61 tgctgcccc ccaacagcag cgcttggttt cccggctggg ccgagccga cagcaacggc
 121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catccccggtc
 181 atcatcacgg cggctctactc cgtagtgttc gtcgtgggct tgggtgggcaa ctcgctgggtc
 241 atgttcgtga tcatccgata cacaagatg aagacagcaa ccaacattta catatttaac
 301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
 361 atgaattcct ggcttttttg ggatgtgctg tgcaagatag taatttccat tgattactac
 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
 481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
 541 tgcacatggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacccaaa
 601 gtcaggggaag acgtcgatgt cattgagtgc tccttgacagt tcccagatga tgactactcc
 661 tgggtgggacc tcttcatgaa gatctgcgtc ttcacatcttg ccttcgtgat ccctgtcctc
 721 atcatcatcg tctgctacac cctgatgatc ctgctgtctca agagcgtccg gctcctttct
 781 ggctcccgag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
 841 gcagtgcttcg tggctgtctg gactccatt cacatattca tcctggtgga ggctctgggg
 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 961 accaacagta gcctgaatcc cattctctac gcctttcttg atgaaaagt caagcgggtg
 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 1141 tgactagtcg tgga

FIGURE 6 AND SEQ ID NO:6

A843G polymorphism of hKOR

1 atggactccc cgatccagat cttccgcggg gagccgggccc ctacctgcgc cccgagcgcc
 61 tgctgcccc ccaacagcag cgcttggttt cccggctggg ccgagccga cagcaacggc
 121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catccccggtc
 181 atcatcacgg cggctctactc cgtagtgttc gtcgtgggct tgggtgggcaa ctcgctgggtc

241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
 301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
 361 atgaattcct ggcccttttg ggatgtgctg tgcaagatag taatttccat tgattactac
 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
 481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
 541 tgcactctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacaaaa
 601 gtcaggggaag acgtcgatgt cattgagtgc tccttgcaat tcccagatga tgactactcc
 661 tgggtgggacc tcttcatgaa gatctgcgtc ttcactcttg ccttcgtgat cctgtcctc
 721 atcatcatcg tctgtctacac cctgatgatc ctgcgtctca agagcgctcg gctcctttct
 781 ggctcccagag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
 841 gcggtgttcg tctgtctgctg gactccatt cacatattca tcctggtgga ggctctgggg
 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 961 accaacagta gctgaatcc cattctctac gcctttcttg atgaaaagt caagcgggtg
 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 1141 tgactagtcg tgga

FIGURE 7 AND SEQ ID NO:7

C846T polymorphism of hKOR

1 atggactccc cgatccagat cttccgctgg gagccggggc ctacctgcgc cccgagcgcc
 61 tgcttgcctc ccaacagcag cgcttggttt cccggctggg ccgagcccca cagcaacggc
 121 agcgccggct cggaggacgc gcagctggag cccgcgcaca tctccccggc catccccggtc
 181 atcatcacgg cggctctactc cgtagtgttc gtctggtggc tgggtgggcaa ctgcgtggtc
 241 atgttcgtga tcatccgata cacaaagatg aagacagcaa ccaacattta catatttaac
 301 ctggcttttg cagatgcttt agttactaca accatgccct ttcagagtac ggtctacttg
 361 atgaattcct ggcccttttg ggatgtgctg tgcaagatag taatttccat tgattactac
 421 aacatgttca ccagcatctt caccttgacc atgatgagcg tggaccgcta cattgccgtg
 481 tgccaccccg tgaaggcttt ggacttccgc acacccttga aggcaaagat catcaatata
 541 tgcactctggc tgctgtcgtc atctgttggc atctctgcaa tagtccttgg aggcacaaaa
 601 gtcaggggaag acgtcgatgt cattgagtgc tccttgcaat tcccagatga tgactactcc
 661 tgggtgggacc tcttcatgaa gatctgcgtc ttcactcttg ccttcgtgat cctgtcctc
 721 atcatcatcg tctgtctacac cctgatgatc ctgcgtctca agagcgctcg gctcctttct
 781 ggctcccagag agaaagatcg caacctgcgt aggatcacca gactggtcct ggtggtggtg
 841 gcaagtgttc tctgtctgctg gactccatt cacatattca tcctggtgga ggctctgggg
 901 agcacctccc acagcacagc tgctctctcc agctattact tctgcatggc cttaggctat
 961 accaacagta gctgaatcc cattctctac gcctttcttg atgaaaagt caagcgggtg
 1021 ttccgggact tctgctttcc actgaagatg aggatggagc ggcagagcac tagcagagtc
 1081 cgaaatacag ttcaggatcc tgcttacctg agggacatcg atgggatgaa taaaccagta
 1141 tgactagtcg tgga